CLAIMS

1. An imaging color toner comprising at least a binder resin, a colorant and an infrared absorber, which is used in an imaging process employing a photofixing system, wherein

the binder resin contains, as a principal component, a polyester resin obtained by mixing a first polyester resin with a second polyester resin in a weight ratio of 80:20 to 20:80;

the first polyester resin is a non-linear polyester resin having a softening point Tsp of not lower than 120°C and lower than 170°C, and also contains 1 to 25 parts by weight of a chloroform-insoluble content as the component; and

the second polyester resin is a non-linear polyester resin having a softening point Tsp of not lower than 80°C and lower than 110°C.

2. The imaging color toner according to claim 1, wherein an acid value of the first polyester resin is from 20 to 40, an acid value of the second polyester resin is from 5 to 20, and an acid value of the entire polyester resin is from 15 to 35.

3. The imaging color toner according to claim 1 or 2, wherein the infrared absorber is a compound which shows a light absorption peak at a wavelength ranging from 700 to 1000 nm.

4. The imaging color toner according to claim 3, wherein the infrared absorber is at least one compound selected from the group consisting of cyanine, anthaquinone, phthalocyanine, naphthalocyanine, polymethine, nickel complex, aminium, diimonium, tin oxide, ytterbium oxide, ytterbium phosphate, and cerium oxide.

5. The imaging color toner according to claim 1 or 2, wherein the binder resin contains at least a polyester resin originating from an alkylene oxide adduct of bisphenol A represented by the following formula (I):

$$H(OR)_x-O-C_6H_4-\underset{\displaystyle CH_3}{\overset{\displaystyle CH_3}{\overset{|}{\underset{|}{C}}}}-C_6H_4-O-(RO)_y H \qquad \cdots (I)$$

wherein R represents a substituted or unsubstituted alkyl group, and x and y each represents an integer of 1 or more.

6. The imaging color toner according to claim 1 or claim 2, wherein the color toner is used in an electrophotographic imaging process.

7. A method of forming a color image on a recording medium by means of an electrophotographic system which comprises the steps of forming an electrostatic latent image by image exposure, visualizing the electrostatic latent image by development, transferring the visualized image onto the recording medium and fixing the transferred image, wherein

a developing agent comprising a color toner, which comprises at least a binder resin, a colorant and an infrared absorber, is used in the step of developing the electrostatic latent image,

the binder resin containing, as a principal component, a polyester resin obtained by mixing a first polyester resin with a second polyester resin in a weight ratio of 80:20 to 20:80;

the first polyester resin being a non-linear polyester resin having a softening point Tsp of not lower than 120°C and lower than 170°C, and also containing 1 to 25 parts by weight of a chloroform-insoluble content as the component; and

the second polyester resin being a non-linear polyester resin having a softening point Tsp of not lower than 80°C and lower than 110°C; and

a photofixing system is used at a light emission energy density ranging from 1.0 to 6.0 J/cm^2 in

the step of fixing the transferred image after transferring the image visualized by using the developing agent onto the recording medium.

8. The color image forming method according to claim 7, wherein an acid value of the first polyester resin is from 20 to 40, an acid value of the second polyester resin is from 5 to 20, and an acid value of the entire polyester resin is from 15 to 35.

9. The color image forming method according to claim 7 or 8, wherein the infrared absorber is a compound which shows a light absorption peak at a wavelength ranging from 700 to 1000 nm.

10. The color image forming method according to claim 9, wherein the infrared absorber is at least one compound selected from the group consisting of cyanine, anthaquinone, phthalocyanine, naphthalocyanine, polymethine, nickel complex, aminium, diimonium, tin oxide, ytterbium oxide, ytterbium phosphate, and cerium oxide.

11. An apparatus for forming a color image on a recording medium by means of an electrophotographic system, comprising an image exposing device for forming an electrostatic latent image, a developing device for visualizing the electrostatic latent image, an image transferring device for transferring the visualized image onto the recording medium, and an image fixing device for fixing the transferred image onto the recording medium, wherein

the developing device is loaded with a developing agent containing a color toner, which comprises at least a binder resin, a colorant and an infrared absorber,

the binder resin containing, as a principal component, a polyester resin obtained by mixing a first polyester resin with a second polyester resin in a weight ratio of 80:20 to 20:80;

the first polyester resin being a non-

linear polyester resin having a softening point Tsp of not lower than 120°C and lower than 170°C, and also containing 1 to 25 parts by weight of a chloroform-insoluble content as the component; and

the second polyester resin being a non-linear polyester resin having a softening point Tsp of not lower than 80°C and lower than 110°C; and

the image fixing device being provided with a photofixing device having a light emission energy density ranging from 1.0 to 6.0 J/cm^2.

12. The color image forming apparatus according to claim 11, wherein an acid value of the first polyester resin is from 20 to 40, an acid value of the second polyester resin is from 5 to 20, and an acid value of the entire polyester resin is from 15 to 35.

13. The color image forming apparatus according to claim 11 or 12, wherein the infrared absorber is a compound which shows a light absorption peak at a wavelength ranging from 700 to 1000 nm.

14. The color image forming apparatus according to claim 13, wherein the infrared absorber is at least one compound selected from the group consisting of cyanine, anthaquinone, phthalocyanine, naphthalocyanine, polymethine, nickel complex, aminium, diimonium, tin oxide, ytterbium oxide, ytterbium phosphate, and cerium oxide.